

Associate Environmental Research Scientist
Open Examination

Exam Code : 5DM01
Salary Range: \$4316.00 – \$5208.00
Final Filing Date: SEPTEMBER 30, 2004



State of California
Environmental Protection Agency
Department of Pesticide Regulation
Personnel Services Branch
1001 I Street
P.O. Box 4015
Sacramento, CA 95812-4015
(916) 322-4553

CALIFORNIA STATE GOVERNMENT – An equal opportunity employer to all regardless of race, color, creed, national origin, ancestry, sex, marital status, disability, religious or political affiliation, age or sexual orientation.

It is an objective of the state of California to achieve a drug-free state work place. Any applicant for state employment will be expected to behave in accordance with this objective because the use of illegal drugs is inconsistent with the law of the state, the rules governing civil service and the special trust placed in public servants.

WHO MAY APPLY Applicants who meet the minimum qualifications (Entrance requirements) as stated below as of the final filing date of **September 30, 2004**.

HOW TO APPLY An Examination Application (STD. 678) must be POSTMARKED no later than the final filing date of **September 30, 2004**. Examination applications postmarked after the final filing date will not be accepted for any reason. Applications are available and may be filed in person or by mail with:

Department of Pesticide Regulation
Personnel Services Branch/Examinations Unit
1001 I Street, 4th Floor
P.O. Box 4015
Sacramento, CA 95812-4015

For your convenience, you may also obtain a copy of the Examination Application (STD. 678) via the Internet at http://www.spb.ca.gov/Employment/employment_forms_brochures.htm

**SUBMIT APPLICATIONS ONLY TO THE ADDRESS INDICATED ABOVE.
DO NOT SUBMIT APPLICATIONS TO THE STATE PERSONNEL BOARD.**

SPECIAL TESTING ARRANGEMENTS If you have a disability and need special testing arrangements, refer to question number two (2) of the “Examination Application” (STD. 678) and mark the appropriate box. You will be contacted to make specific arrangements.

REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION It is your responsibility to make sure you meet the education and/or experience requirements stated below. Your signature on your application indicates you have read, understood and possess the basic qualifications required. All applicants must meet the education and/or experience requirements for this examination by the final filing date of **September 30, 2004**.

NOTE: All Examination Applications (STD. 678) must include: "TO" and "FROM" employment dates (month/day/year); time base; salary; civil service class/job title; and a detailed description of the specific duties performed. Applications excluding any of this information may be rejected. Resumes containing additional information may be submitted with the examination application.

Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as “Either I” or “II” or “III” etc. For example, candidates possessing qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirement.

MINIMUM QUALIFICATIONS **EITHER I**
One year of experience in the California state service performing duties equivalent to an Environmental Research Scientist, Range B.

Or II
One year of experience in the California state service performing duties equivalent to an Associate Pesticide Review Scientist.

Or III
Experience: Two years of professional research experience in health and safety studies, environmental contaminant studies, pest management or biological control studies gained after obtaining a master's degree; and
Education: Possession of a Master's Degree or its equivalent in Chemistry, Biological Sciences, Environmental Sciences, Biochemistry, Earth Sciences, Toxicology, Meteorology, Physics, Statistics, Computer Science, Mathematics, Entomology, Plant Pathology, or related agricultural sciences from an accredited college or university or an equivalent degree approved by the California Superintendent of Public Instruction under the provisions of California Education Section 94310.2.

Or IV
Education: Possession of a Doctoral Degree or its equivalent in Chemistry, Biological Sciences, Environmental Sciences, Biochemistry, Earth Sciences, Toxicology, Meteorology, Physics, Statistics, Computer Science, Mathematics, Entomology, Plant Pathology, or related agricultural sciences from an accredited college or university or an equivalent degree approved by the California Superintendent of Public Instruction under the provisions of California Education Section 94310.2.

**POSITION
DESCRIPTION**

This is the full journey level. Under general direction, research scientists at this level perform the full range of duties involving planning, organizing, and coordinating scientific and/or technical research and statistical work in environmental hazards assessment, pest management, biological control, and health and safety; organize and direct environmental hazards, pest management, biological control, and health and safety surveys; devise survey techniques and instruct others in their use; provide technical support to the senior level scientists in risk analysis and review, and evaluation of environmental impact, efficacy, hazard or safety of pesticides used or proposed for use in California; and assist in planning and conducting training of State or county personnel. Incumbents may have leads or project responsibility over other scientists and seasonal staff. Incumbents may design and coordinate the implementation of legislation including regulation and report writing. In some positions, incumbents may be required to travel throughout the State.

Positions exist with the Department of Pesticide Regulation in Sacramento.

**EXAMINATION
INFORMATION**

This examination will consist of a **Supplemental Application weighted 100%**. To obtain a position on the eligible list, applicants must achieve a minimum rating of 70% on the Supplemental Application. Candidates who meet the Minimum Qualifications will be mailed a supplemental application designed to elicit a range of specific information regarding each candidate’s knowledge, abilities, and potential to effectively perform the duties relative to the classification. Return of the supplemental application is mandatory. Candidates who do not return the completed supplemental application will be eliminated from this examination.

**SCOPE OF
EXAMINATION**

- A. Knowledge of:**
1. General knowledge of scientific disciplines (physical, biological, mathematical, and environmental) pertinent to the study of pest management, or biological control, or pesticides and pollutants and their effects on health and safety and the environment, monitoring and calibration techniques, computer applications, statistics, biological receptor responses and basic research principles.
 2. Principles and procedures of pesticide application and management.
 3. Principles and procedures necessary to identify and define the environmental fate of various pollutants and agricultural chemicals.
 4. Principles and procedures of Integrated Pest Management and biological control.
 5. Plant-chemical interactive effects.
 6. Provisions of the California Food and Agricultural Code pertaining to environmental hazards assessment, health and safety, pest management, and biological control.
 7. Techniques of effective research project management.
 8. Fundamentals of environmental sample collection, handling and storage.
 9. The principles of scientific writing and the peer review process.
 10. General concepts of toxicology and risk assessment.
 11. Basic contemporary computer operating systems and the functions of a program language within the operation systems.
- B. Ability to:**
1. Compile and analyze data on presence and dynamic behavior of pesticide residues in air, water, soil, vegetation, human and animal tissues.
 2. Compile and analyze data on agricultural and non-agricultural pests and their control.
 3. Assess data on effects of air pollutants and interactions of pesticides and air pollutants on human, vegetation, and other environmental components.
 4. Apply scientific methods and principles.
 5. Analyze data and reach sound conclusions using appropriate methods including statistics, computer processing and modeling.
 6. Review, interpret, and critique protocols.
 7. Conduct thorough and discriminating scientific literature research, including critical evaluation of scientific studies.
 8. Design and conduct laboratory research or field research in agricultural or urban environments.
 9. Analyze situations and take effective action.
 10. Work cooperatively with others.
 11. Interact diplomatically and tactfully with stakeholders.
 12. Prepare clear, complete, and technically accurate research reports.
 13. Communicate clearly, concisely, and logically in writing and in oral presentations.
 14. Develop studies of pollution and pesticide monitoring methods.
 15. Plan, organize, and implement studies on environmental contaminants, health and safety effects, pest management or biological control.
 16. Coordinate and lead the work of others, or coordinate technical phases of smaller monitoring projects.
 17. Scientifically evaluate and review data.
 18. Develop appropriate solutions and recommend effective courses of action.
 19. Think critically and quantitatively in approaching problems.
 20. Interpret laws and regulations.
 21. Read and write in English.
 22. Work through administrative procedures.

ELIGIBLE LIST INFORMATION	A departmental open eligible list will be established for the Department of Pesticide Regulation. The list will expire 24 months after it is established unless the needs of the service and conditions of the list warrant a change in this period.
VETERANS' POINTS/CAREER CREDITS	Veterans' preference points and career credits are not granted in this examination.

GENERAL INFORMATION

The California Department of Pesticide Regulation and the State Personnel Board reserve the right to revise the examination plan to better meet the needs of the service if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

Americans with Disabilities Act, Title II: The California Department of Pesticide Regulation (DPR) is committed to a strong policy of equal employment opportunity. To this end, DPR does not discriminate against or exclude any person from participating in the employment process, advancement, benefits of employment, or in the admission and access to programs or activities administered by DPR on the basis of race, color, national origin, ancestry, religion, creed, sex, marital status, sexual orientation, pregnancy, age, veteran status, political affiliation, or disability (including AIDS) as required by Title II of the Americans with Disabilities Act (ADA). Reasonable accommodations for qualified individuals with disabilities will be made available upon request. Candidates must be able to perform the essential functions of the position with or without reasonable accommodations.

It is the candidate's responsibility to contact the **Department of Pesticide Regulation, Personnel Services Branch/Examinations Unit, (916) 445-4162** three days prior to the written test date if he/she has not received his/her notice.

For an examination without a written feature it is the candidate's responsibility to contact the **Department of Pesticide Regulation, Personnel Services/Examinations Unit, (916) 445-4162** three weeks after the final filing date if he/she has not received a progress notice.

If a candidate's notice of oral interview or performance test fails to reach him/her prior to the day of the interview due to a verified postal error, he/she will be rescheduled upon written request.

Applications are available at State Personnel Board offices, local offices of the Employment Development Department, the Department of Pesticide Regulation, and the State Personnel Board's website at <http://www.spb.ca.gov>.

If you meet the requirements stated on this bulletin, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in this examination will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

Examination Locations: When a written test is part of the examination, it will be given in such places in California as the number of candidates and conditions warrant. Ordinarily, oral interviews are scheduled in Sacramento, San Francisco, and Los Angeles. However, locations of interviews may be limited or extended as conditions warrant.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) service-wide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on this bulletin.

Promotional Examinations only: Competition is limited to employees who have a permanent civil service appointment. Under certain circumstances other employees may be allowed to compete under provisions of Rules 234, 235, and 235.2. State Personnel Board Rules 233, 234, 235, 234.2, and 237 contain provisions regarding civil service status and eligibility for promotional examination. These rules may be reviewed at departmental personnel offices or at the information counter of state personnel Board office.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

Interview Scope: If an interview is conducted, in addition to the scope described on this bulletin, the panel may consider education, experience, personal development, personal traits, and fitness. In appraising experience, more weight will be given to the breadth and recency of pertinent experience and evidence of the candidate's ability to accept and fulfill increasing responsibilities than to the length of his/her experience. Evaluation of a candidate's personal development will include consideration of his/her recognition of his/her own training needs; his/her plans for self-development; and the progress he/she has made in his/her efforts toward self-development.

High School Equivalence: Equivalence to completion of the 12th grade may be demonstrated in any one of the following ways: 1) passing the General Educational Development (GED) test; 2) completion of 12 semester units of college-level work; 3) certification from the State Department of Education, a local school board, or high school authorities that the candidate is considered to have education equivalent to graduation from high school; or 4) for clerical and accounting classes, substitution of business college work in place of high school on a year-for-year basis.

TDD is Telecommunications Device for the Deaf and is reachable only from phones equipped with TDD device.
California Relay (Telephone) Service for the Deaf or Hearing-Impaired
From TDD phones: 1-800-735-2929 or From voice phones: 1-800-735-2922